

Carroll County Unpaved Roads

Presented by: Department of Public Works

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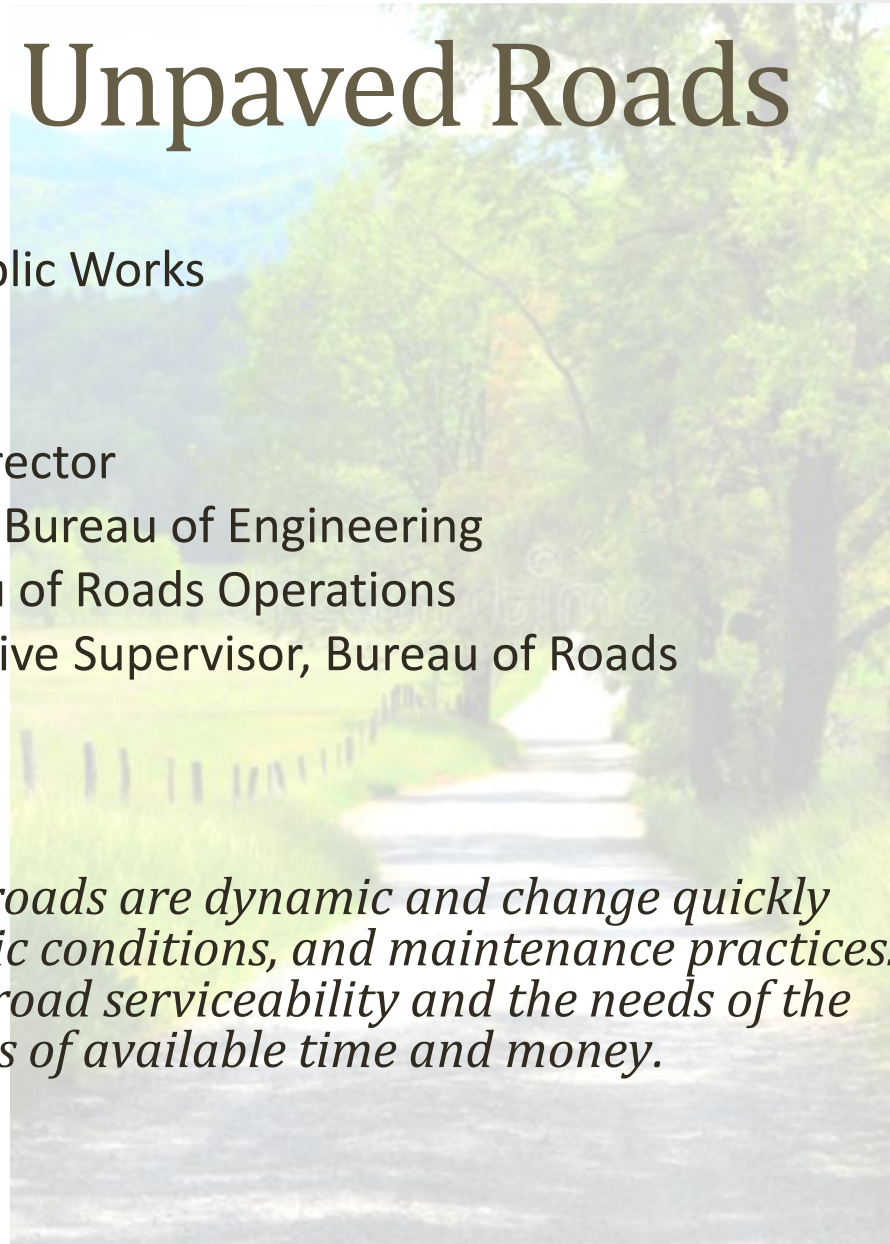
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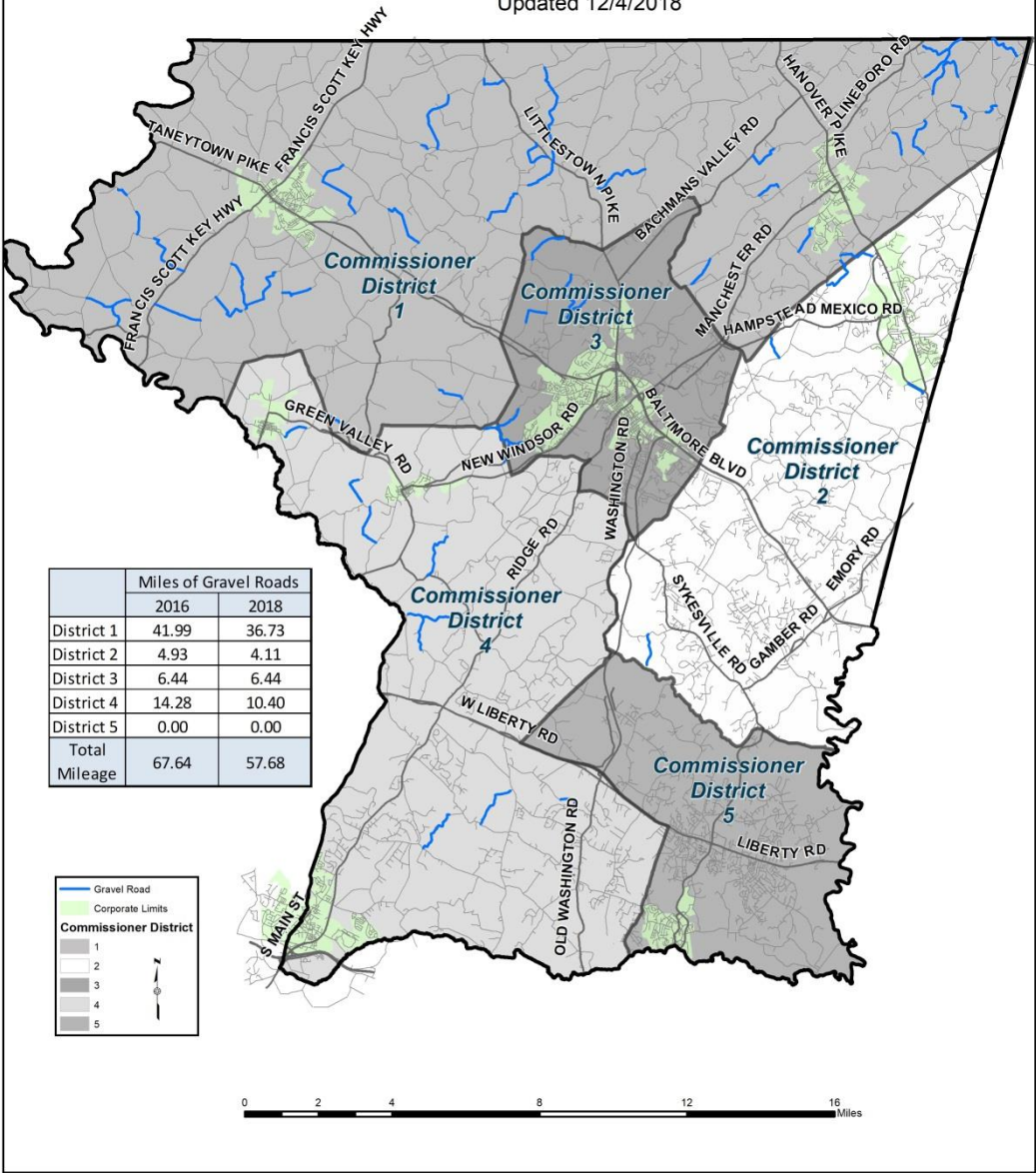
Eric Silverman, Roads Administrative Supervisor, Bureau of Roads Operations

Surface conditions on unpaved roads are dynamic and change quickly depending on the weather, traffic conditions, and maintenance practices. Maintenance activities address road serviceability and the needs of the traveling public within the limits of available time and money.



COUNTY MAINTAINED GRAVEL ROADS

Updated 12/4/2018



Unpaved Road Mileage by District

District	Current Unpaved Road Mileage	Total District Maintained Road Mileage	Unpaved Percent of Total
1	36.7	313	11.7%
2	4.1	196	2.0%
3	6.4	97	6.6%
4	10.40	226	4.6%
5	0.00	145	0.0%

Prescriptive Easement

- Prescription refers to a type of easement – the right to use the land of another. It requires the use of the land to have been open, continuous, exclusive, and under claim of right for the appropriate statutory period. It differs from adverse possession in that adverse possession entails the acquisition of title to the property, whereas prescription relates to a right to use the property of another that is consistent with the rights of the owner. (West's Encyclopedia of American Law, edition 2)
- Estimate of County maintained roads that fall under prescriptive easement is 68%
- Approximately 32% of County maintained roads are within in-fee dedications or purchased through land acquisition

Snapshots of Unpaved Roads



Babylon Road

Sixes Bridge Road



Annual Maintenance Practices

- Breakdown on maintenance practices by season
 - Winter
 - Snow removal, as needed
 - Apply anti-skid material, as needed
 - Spring
 - Grading and shaping of roadway and addressing shoulders
 - Add aggregate, as needed
 - Pipe culvert cleaning and replacement if necessary
 - Calcium chloride treatment for dust control/hardening
 - Summer
 - Mowing, two to three times, including weed control at traffic barrier
 - Calcium chloride treatment for dust control/hardening as needed
 - Fall
 - Grading and shaping of roadway and addressing shoulders
 - Add aggregate, as needed
 - Pipe culvert cleaning and replacement if necessary
 - Calcium chloride treatment for dust control/hardening

Estimated Costs to Upgrade

Acceptable Geometry - Defined as a gravel road where a width of 16 to 18-ft minimum is attainable and having geometry that generally follows accepted low volume road design standards.

199,600 Average cost per mile

Road Name	Properties w/access	Average Daily Traffic (ADT)	Gravel Length (mile)	Total	Comments - Major issues
Babylon Rd	23	213	1.89	466,000	Horizontal, width, drainage
Baugher Road	13	63	0.82	163,700	Horizontal, width
Baumgardner Rd South	6	98	0.69	137,800	Width
Bethel Road	19	115	1.46	291,500	Horizontal, vertical, drainage
Brown Road	5	106	1.03	205,600	Horizontal, width
Cross Road Schoolhouse F	30	191	1.08	215,600	Width
Diehl Road	12	88	1.48	295,500	Horizontal
Doctor Stitely Rd	3	58	0.82	163,700	Horizontal, width
Doss Garland Road	7	-	0.50	99,800	Relocated with Hampstead bypass
East Diehl Road	16	51	0.67	133,800	Horizontal
Indian Valley Trail	26	112	1.18	235,600	Horizontal, width
Jasontown Road	21	147	0.70	139,800	none
John Shirk Road	10	122	1.72	343,400	Horizontal, width, drainage
Ladiesburg Road	2	119	0.69	137,800	Horizontal, width, drainage
Leisters School Road	5	28	0.60	119,800	Width, drainage
Motter Rd	11	76	0.71	141,800	Horizontal
Nusbaum Road	6	112	0.85	169,700	Horizontal, vertical, width
Old Fridinger Mill Rd (131)	18	94	0.78	155,700	Width
Old Fridinger Mill Rd (147)	20	55	0.87	173,700	Width
Pinch Valley Road	31	191	1.08	215,600	Horizontal, width
Ralph Dell Road	7	106	0.97	193,700	Horizontal, width
Rockland Road	9	85	0.85	169,700	Width, drainage, environmental
Saw Mill Road	4	49	0.28	55,900	Width
Sharrett Road	8	66	1.34	267,500	Vertical, width
Stover Road	12	49	1.47	293,500	Horizontal, width
Study Road	8	58	1.26	251,500	Horizontal
Turkeyfoot Rd (89)	24	238	1.84	367,300	Horizontal, width, drainage
Winters Church Road	9	94	0.86	171,700	Horizontal, vertical, width
Young Rd	30	198	0.71	141,800	Width, drainage
Total				\$5,918,500	

Inadequate Geometry - Defined as a road where obtaining at least 16-ft in width would be challenging and having geometry that vertical and horizontal curves, sight distance issues, would need to be corrected to address safety issues, including substandard vertical and horizontal curves, sight distance issues, and insufficient drainage.

1,996,000 Average cost per mile

Road Name	Properties w/access	Average Daily Traffic (ADT)	Gravel Length (mile)	Total	Comments - Major issues
Adams Mill Road	6	78	0.49	978,100	Horizontal, width, drainage
Basehores Mill Road	22	66	1.18	2,355,300	Horizontal, width, drainage
Baughman Mill Road	29	64	1.33	2,654,700	Horizontal, width
Baumgardner Road (10)	3	18	0.39	778,500	Width, environmental
Bert Fowler Road	15	89	0.78	1,556,900	Vertical, horizontal, drainage, width
Boog Road	18	76	1.18	2,355,300	Vertical, horizontal, drainage, width
Buckhorn Road	37	259	0.63	1,257,500	Vertical, horizontal, width
Davis Road	36	178	1.44	2,874,300	Vertical, horizontal, width, drainage
Falls Road	43	84	0.62	1,237,600	Vertical, horizontal, drainage, width
Green Meadow Lane	24	88	1.19	2,375,300	Horizontal, width, environmental
Greenwood Church Road	19	71	1.23	2,455,100	Horizontal, width, drainage
Hapes Mill Road	7	54	1.17	2,335,400	Horizontal, width, drainage
Hoover Mill Road	18	49	0.93	1,856,300	Vertical, horizontal, drainage, width
Hughes Shop Road	26	163	1.22	2,435,200	Width, drainage, environmental
Kern Road	7	58	0.66	1,317,400	Vertical, horizontal, drainage, width
Kowomu Trail	20	87	1.38	2,754,500	Horizontal, vertical, width
Lineboro Road East	16	123	0.99	1,976,100	Vertical, horizontal, drainage, width
Naylor's Mill Road	4	25	0.62	1,237,600	Horizontal, width, environmental
Old Kump Station Road	6	11	0.22	439,200	Width, environmental
Reifsnider Road	13	84	1.54	3,073,900	Horizontal, width
Rohrbaugh Road	24	117	1.03	2,055,900	Vertical, horizontal, drainage, width
Roller Road	11	33	0.46	918,200	Vertical, horizontal, drainage, width
Roops Mill Road	14	82	1.54	3,073,900	Horizontal, width, environmental
Sams Creek Road	38	122	1.44	2,874,300	Horizontal, width
Schalk Road 2	24	124	1.22	2,435,200	Vertical, horizontal, drainage, width
Sixes Bridge Road	13	49	1.31	2,614,800	Horizontal, vertical, width
Stem Road	20	43	0.90	1,796,400	Vertical, width, environmental
Turkeyfoot Road	37	238	1.03	2,055,900	Not evaluated
Wilt Road	18	57	1.5	2,994,000	Vertical, horizontal, width, drainage
York Road 1	23	67	1.07	2,135,800	Vertical, width, drainage
Total				\$61,258,600	

Recent and Planned

- Work completed in the last three years

Budget Funding	Mileage	Cost
Annual Operating	16.1	\$3,758,700
Capital	1.9	\$1,318,200

- Planned projects for 2019

Budget Funding	Mileage	Cost
Annual Operating Old Kump Station and Winters Church Roads	0.8	\$210,000
Capital - None		

Other considerations

- Gravel complaints:
 - Potholes and washouts
 - Dust
 - Drainage
 - Gravel on private property, etc...
- Asphalt complaints:
 - Presumed increased speed and traffic
 - Drainage changes
 - I wanted to live on a gravel road, etc...
 - Not every resident wants “his or her” unpaved road to be paved
- Staff time, signage, traffic barrier(s)

Questions???

Thank You!